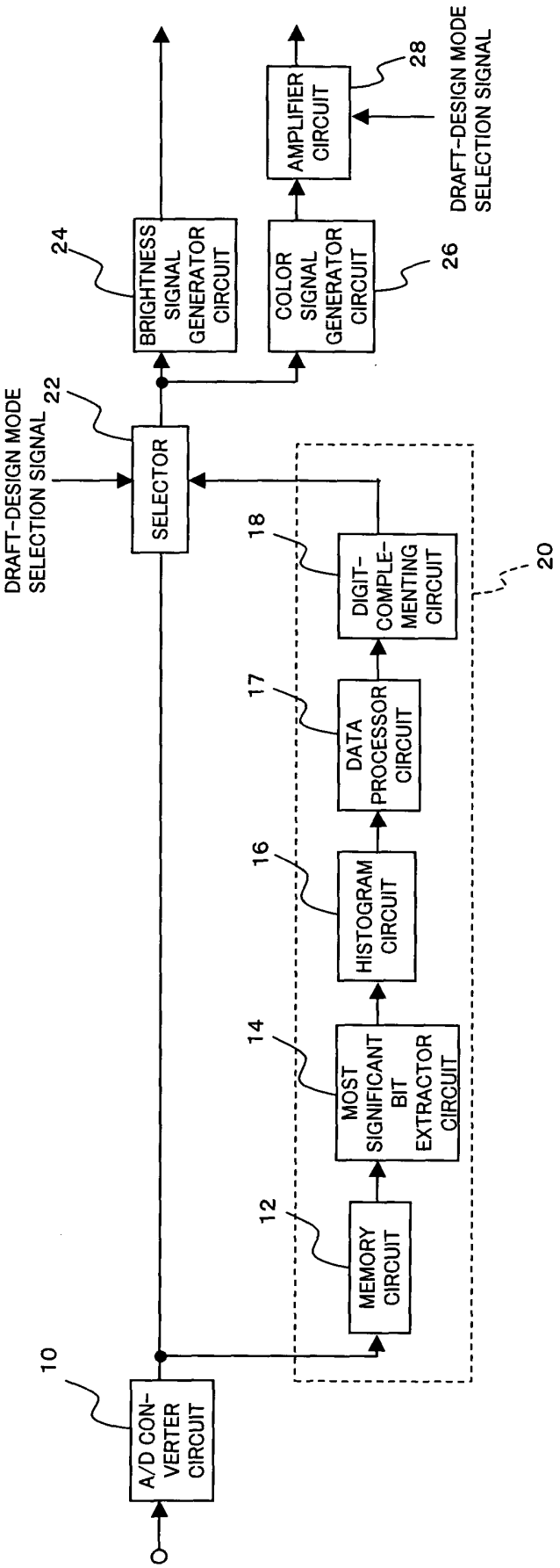
10
A/D CONVERTER CIRCUIT
12
MEMORY CIRCUIT
14
MOST SIGNIFICANT BIT EXTRACTOR CIRCUIT
16
HISTOGRAM CIRCUIT
17
DATA PROCESSOR CIRCUIT
18
DIGIT-COMPLEMENTING CIRCUIT
20
22
SELECTOR
DRAFT-DESIGN MODE SELECTION SIGNAL
24
BRIGHTNESS SIGNAL GENERATOR CIRCUIT
26
COLOR SIGNAL GENERATOR CIRCUIT
28
AMPLIFIER CIRCUIT
DRAFT-DESIGN MODE SELECTION SIGNAL

Fig. 1

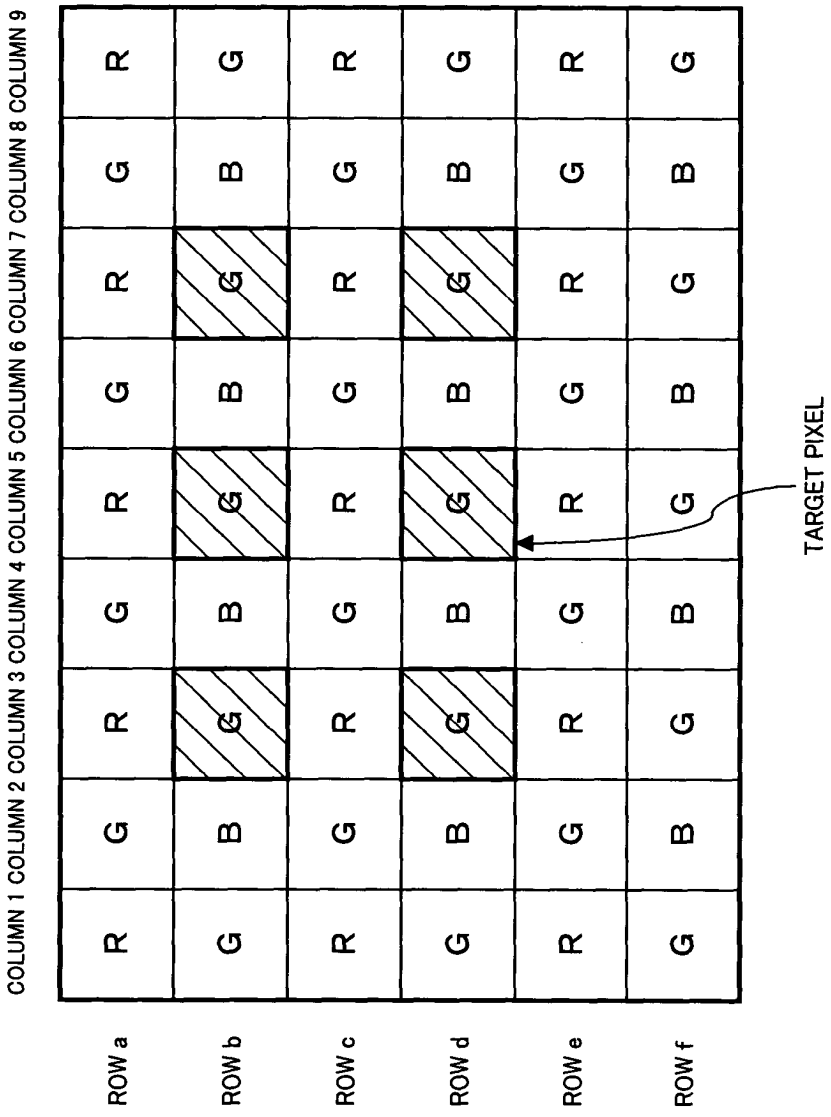
COLUMN 1
COLUMN 2
COLUMN 3
COLUMN 4
COLUMN 5
COLUMN 6
COLUMN 7
COLUMN 8
COLUMN 9
ROW a
ROW b
ROW c
ROW d
ROW e
ROW f
TARGET PIXEL

Fig. 2

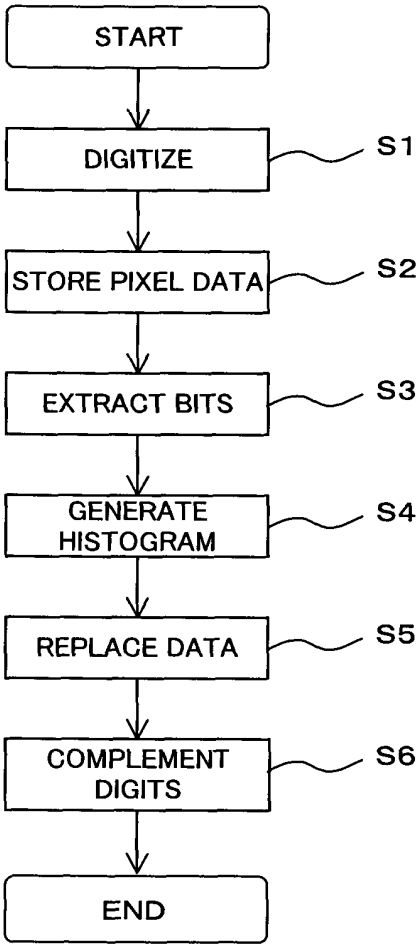
START
DIGITIZE
S1
STORE PIXEL DATA
S2
EXTRACT BITS
S3
GENERATE HISTOGRAM
S4
REPLACE DATA
S5
COMPLEMENT DIGITS
S6
END

Fig. 3

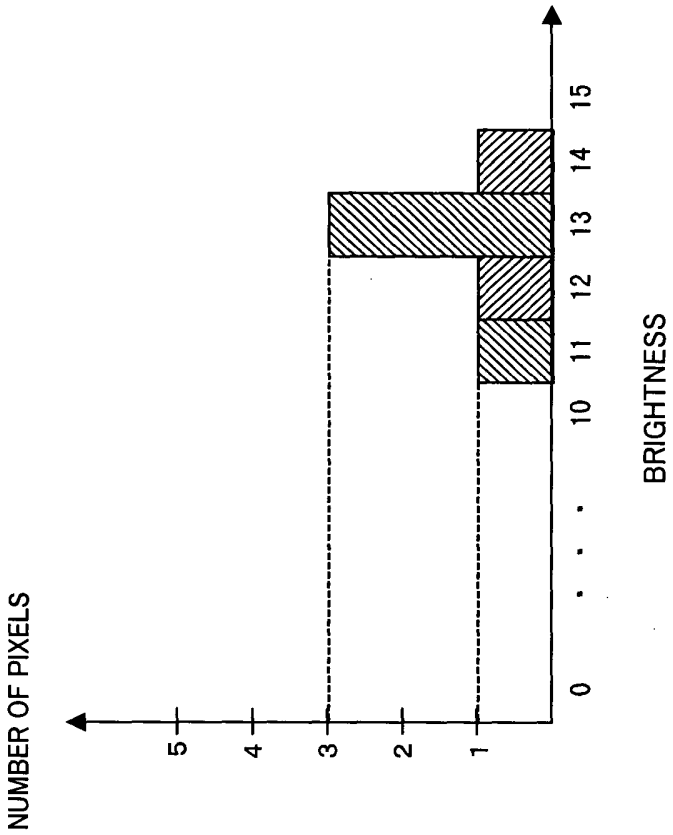

Fig. 4

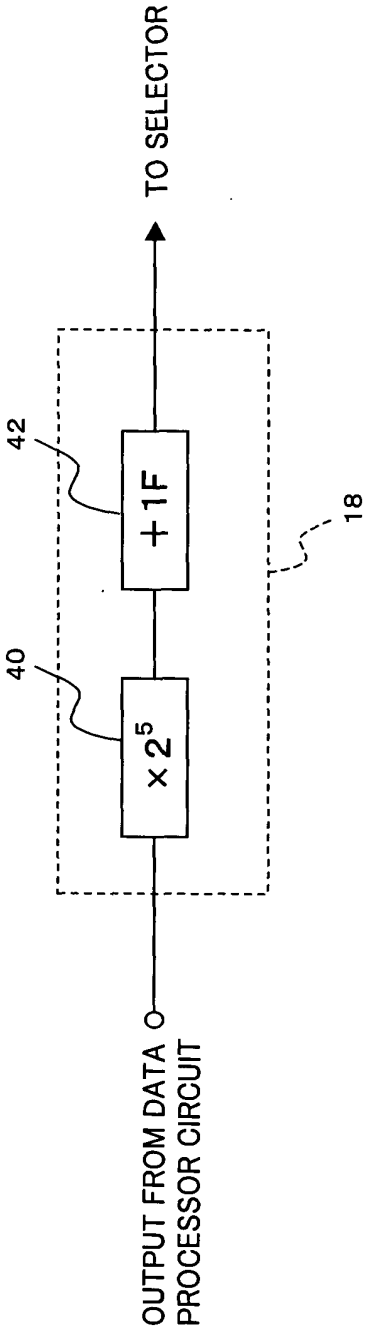
TO SELECTOR
42
+1F
18
40
×2^5
OUTPUT FROM DATA PROCESSOR CIRCUIT

Fig. 5

Fig. 6

Fig. 7

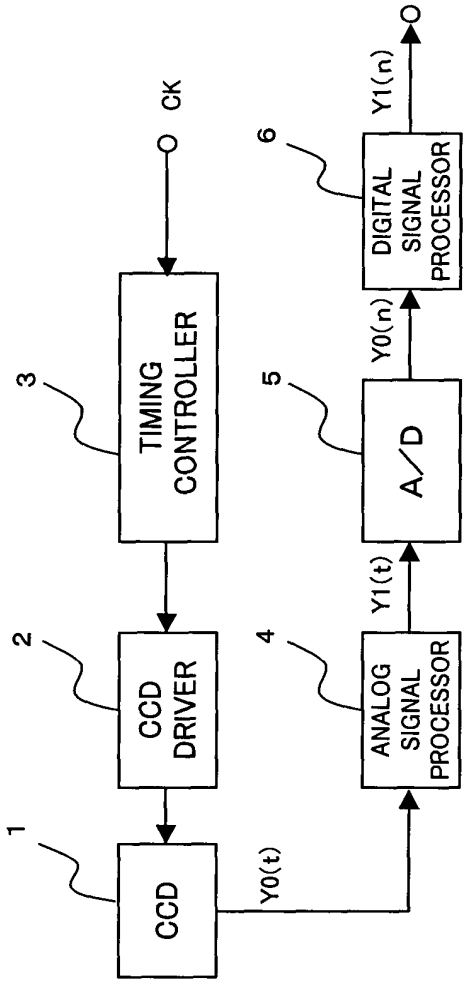
CK
TIMING CONTROLLER
CCD DRIVER
CCD
ANALOG SIGNAL PROCESSOR
A/D
DIGITAL SIGNAL PROCESSOR
Y0(t)
Y1(t)
Y0(n)
Y1(n)
1
2
3
4
5
6

Fig. 8